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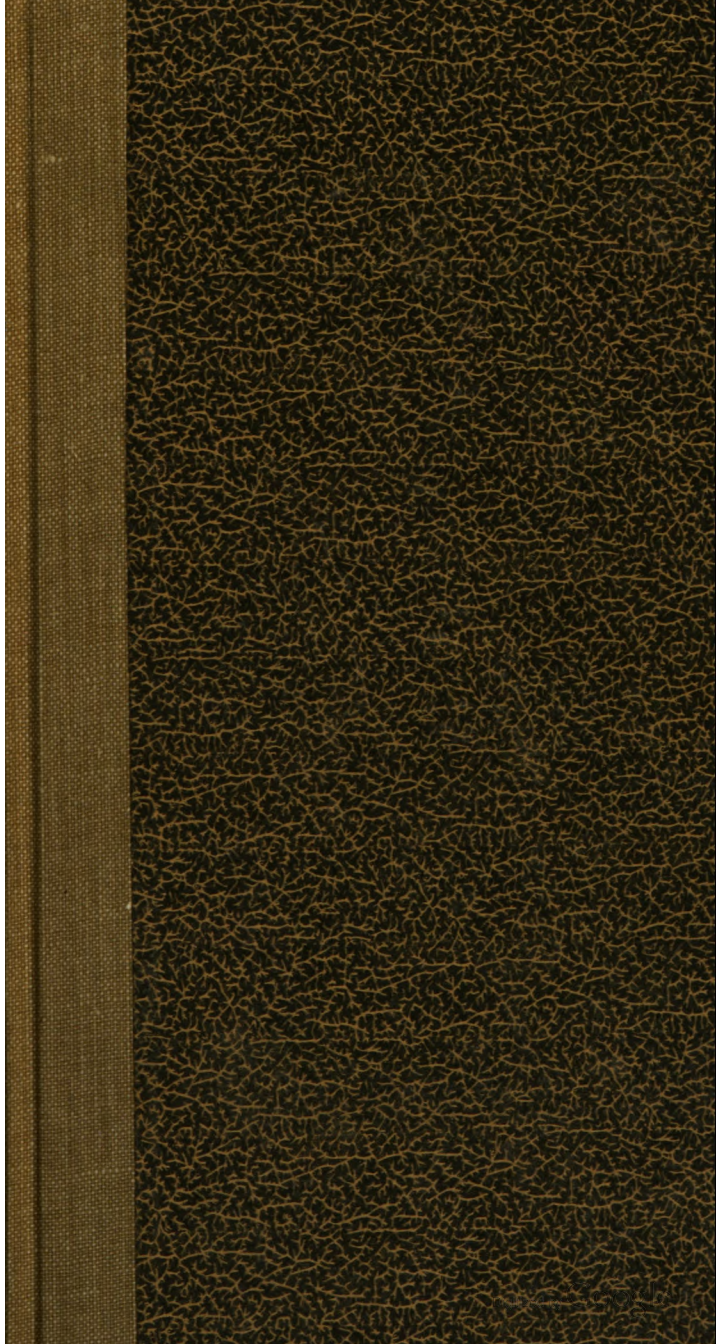
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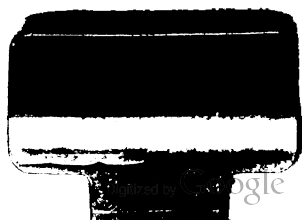
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AGRICULTURAL  
AND  
ADMINISTRATIVE REFORM  
IN  
BENGAL.

BY  
A BENGAL CIVILIAN.

LONDON :  
WYMAN & SONS, 74-76, GREAT QUEEN STREET,  
LINCOLN'S-INN FIELDS, W.C.  
1883.

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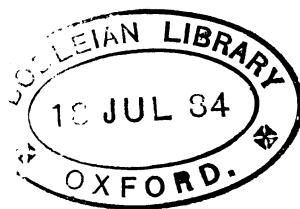




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## PREFATORY NOTE.

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THE following pages have been written amid the pressure of urgent work, and the writer has had but little time to think over the form in which his ideas might best be presented to the public. He believes, however, that those to whom he addresses himself will think more of the matter of which he writes than of the manner, and will excuse defects of literary style if the questions discussed be worthy of their attention.

CALCUTTA, *November*, 1883.



# AGRICULTURAL AND ADMINISTRATIVE REFORM IN BENGAL.

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## I.

IN asking the attention of that increasing portion of the public who take an interest in the welfare of our great Indian dependency to the following observations on some questions connected with agriculture and administration in Bengal, I may admit that I am doubtful if the time is well chosen. The public mind in England has recently been to some extent, and in India to a very great extent continues to be, so agitated with questions connected with self-government and with the proposed amendment of the Indian Criminal Procedure Code, that there would seem to be but little chance of time being spared for the consideration of less exciting topics. Yet, unexciting though the subject of these pages may be, it is in reality of more importance to our Indian empire than even the question of local self-government, and of far greater consequence than Mr. Ilbert's Bill, over which so much enthusiasm has been expended and so much bitterness excited.

There are certain considerations, besides, which suggest that the time is not altogether inopportune for discussing the subjects to which I desire to invite attention. These subjects are intimately connected with the impending Rent Legislation in Bengal; with the action which is being taken in other provinces of our Indian empire in connexion with agricultural reform; with certain administrative improvements which are being introduced into Bengal; and finally with the approaching Industrial Exhibition at Calcutta. I am therefore not entirely without hope that the subject of the following remarks may receive even at the present time some share of attention both in England and in India.

The birth of Agricultural Reform in India may, like the birth of Financial Reform, be assigned to the administration of the lamented Lord Mayo, under whose auspices an Agricultural Department under the Government of India first assumed tangible shape. Lord Mayo's object was to establish a department which was to take cognisance of all matters connected with the practical improvement and development of the agricultural resources of the country; and in furtherance of that object the administration of the land revenue, the development of manufacturing and mining industries, the promotion of trade and commerce, and the collection of agricultural and commercial statistics, were to be under the control of the new department. The project, however, suffered from its founder's death, and, notwithstanding Sir John Strachey's successful

efforts to give it vitality in the North-Western Provinces, it was abandoned as an Imperial measure in 1877.

The idea of an Agricultural Department for India was revived in 1881, in consequence of the report of the Indian Famine Commission. Struck with the absence of proper means of collecting reliable information in times of prosperity, on which the action which adverse times require might be based, the Indian Famine Commission made certain recommendations. Looking at the condition of the country from two points of view, namely, the prevention and the relief of famine, the Commission recommended in the first place that better methods of cultivation should be introduced into India and agricultural knowledge more widely diffused. In the second place, they recommended that measures should be adopted for the collection and record of those results of past experience and current events which would enable the Government to deal systematically, effectively, and economically with famine when it might arise.

These recommendations were in the main approved by the Government of India and by Her Majesty's Government, much stress being laid, in the orders issued by the Secretary of State, on the importance of establishing under local administrations suitable machinery for the collection and record of statistical information, and for the improvement of agriculture throughout the country. It was the want of such machinery which marred



the usefulness of Lord Mayo's plans ; and to avoid a repetition of the failure which attended these plans, the Government of India, which itself seldom initiates action, recommended, that provincial agencies should be created to give effect to what was now its settled policy in the matter of agricultural and industrial improvement.

These progressive views did not, when they were first promulgated, meet with acceptance in Bengal. It was there maintained that industrial reform or improved local agency was not suitable to the circumstances of Bengal ; and the Provincial Government was disposed to trust to the impending legislation on the rent question for a solution of the difficulties under which the Province laboured in the matter of agricultural improvement or statistical research. It would serve no useful purpose on this occasion to follow the discussions which passed on this matter ; but in regard to the remedial effects of the rent legislation on the evils depressing agriculture in Bengal, it may be observed that no competent judge is now disposed to expect from that legislation any such satisfactory results as the Local Government was, not long ago, content to await. Apart from the question of statistical information, which the new rent law, if supplemented by a detailed survey of the Province and a record of cultivators' rights, may supply, it is daily becoming more obvious to all interested in the prosperity of the country that the creation of an Agricultural Department is calculated to confer

many benefits on the people of Bengal and many administrative advantages on the Government. Before proceeding, however, to indicate the nature of these benefits, I think it may be desirable to trace briefly the history of the various efforts which have been made to promote statistical inquiry and agricultural improvement in Bengal, in the hope that from the course of past experience some useful lessons may be derived for future guidance.

## II.

The history of statistical research and agricultural improvement in Bengal goes a long way further back than is commonly supposed.

It is a well-known fact that in Bengal, from the earliest historic time, the land has always been the principal source of public revenue as well as of private wealth, and the regulation of matters connected with the land was therefore always a chief object of attention with the ruling powers. Land revenue settlements and the organisation of *patwaris* and *canungos* (village accountants and fiscal registrars), which is essential to effective revenue administration in India, hold an important position in the fiscal systems of the earliest rulers of the country; and so we find that, allowing for the difference in area and the purchasing power of silver, such an organisation enabled the Emperor Akbar and his immediate successors to levy from the land three times the amount which the Govern-

ment of India receives to-day. The organisation was both comprehensive and minute. "The Government," says Mr. Shore (afterwards Lord Teignmouth and Governor-General of India), "in virtue of its claim to a share in the rents, considered itself entitled to the minutest information regarding the land, its produce, the rents paid by the ryots, and all transfers in their possession. The duty of the rural canungos (fiscal registrars) was to record and furnish the information, and the accounts formerly kept by them were calculated to afford it." The strength of the Mogul fiscal system, however, did not long outlive the dynasty. The waning power of the Central Government compelled recourse to that system of farming the revenue which has ever had calamitous results, whether tried among Eastern or Western peoples. When, under this system of revenue farming, the only limit of exaction became the cultivator's capacity to pay, the utility to the Central Government of agricultural statistics, or indeed of any detailed knowledge of the produce of land, was no longer apparent. The fiscal registrar's office, therefore, fell into abeyance, and practically disappeared in the general disorganisation which attended the dismemberment of the Mogul empire. The *patwari*, or village accountant, however, in this respect unlike the *canungos*, or registrar, was not a modern creation, but the product, skilfully utilised by the Mogul Government, of the indigenous village system of India,—a system which had outlived many centuries

of war and political disorganisation. It is therefore not surprising to find that wherever the village system was not destroyed the village accountant emerged from the troubles of the eighteenth century with such vitality that, in the words of the distinguished author of "Village Communities in the East and West," "the earliest English functionaries engaged on the settlement of land were occasionally led to mistake the accountant for the owner of the village, and to record him as such in the official register." The system, however, of which the accountant was the basis, had disappeared, leaving behind but few traces of its existence, except such as may be found in the Institutes of its Imperial founder. This is the more to be regretted, as the local machinery which the Indian Famine Commission advocate is, allowance being made for time and circumstance, not far different from that which was established in Akbar's reign.

It has been stated that the land, being the principal source of public revenue in India, always engaged a large share of the attention of the Government of the day. The East India Company's servants, however, had peculiar difficulties to contend with in their first efforts at revenue administration after the acquisition of the sovereignty of the country. It was not so much that the value of detailed information was underrated, or that efforts were not made to collect it, as that the agency employed was weak and unsuitable, the system upon which it worked defective, and the time inopportune for

inquiries of the sort. The supervisors appointed after the acquisition by the East India Company of the Dewany or fiscal control of Bengal to superintend the administration of the native officials had, it is true, instructions to collect the fullest information regarding the historical, economical, and social condition of the country, but the first period of respite from intestine strife which the country enjoyed was marked by severe and prolonged famine. The circumstances were not favourable to economic inquiries, and perhaps the financial necessities of the East India Company in those early years of its rule served to concentrate attention more on the collection of a large revenue than on the elaboration of a sound and permanent fiscal machinery. Many abuses, no doubt, were remedied, and, the great famine of 1770 (which swept away one third of the population) once over, the country at large unquestionably enjoyed a degree of peace and of prosperity to which it had long been a stranger. But the necessity the Government was under of raising a revenue without any accurate knowledge of the resources of each district, introduced an element of instability into the fiscal administration.

When the Permanent Settlement of the land revenue was completed, and the pecuniary interests of the East India Company were secured, the Indian Government began to look to measures in the interests of the great body of cultivators. Under the provisions of the Permanent Settlement

of the land revenue, concluded by Lord Cornwallis with the zemindars, who till then had been revenue collectors merely, the right of interference on behalf of the ryots had been reserved by the Government, and in exercise of this right an attempt was made to revive the system of village accountants and fiscal registrars. The object of the Government in wishing to re-organise this system was to create and maintain an authentic record of agricultural and economic facts, valuable for legislative and general administrative purposes. It was not, however, to the interest of the zemindars that the Government should acquire information which might justify interference between them and their ryots, and, therefore, the provisions on the question contained in the earliest regulations (as the legislative enactments of the Governor-General in Council were styled till 1834) remained a dead-letter. The subject was revived from time to time as the Government of the day gathered resolution to supplement the legislation of 1793, which was designed to protect the public revenue, by similar legislation which should protect the ryot. The injunctions of the Legislature, however, were unsupported by executive action, and therefore remained inoperative, as in such matters mere injunctions always will remain in India, till education has leavened the masses far more than it has yet done.

It would be tedious to trace in detail the history of the various legislative and executive efforts which were made after the Permanent Settlement

to revive the system of agricultural registration and account; that history, however, is not without its valuable lesson, and in any effort which it may now make to remedy past shortcomings the Indian Government should take that lesson to heart. Briefly, it teaches that the persistent failure of the Indian Government during a century of continuous effort to establish in Bengal a local agency for the record of economic facts must be traced to the state of the law, which recognised in that agency a dual allegiance. The village accountant, though a public servant, had also duties towards the zemindar, and the allegiance which the accountant thus owed to the zemindar was made use of by the latter to neutralise the intentions of Government. The zemindars loved darkness better than light, not so much because their deeds were evil as because any investigation into the internal economy of their estates was resented by them as an interference with the exercise of that absolute power to which they laid claim, and which the Government till 1859 never had the courage to resist. The zemindars opposed a systematic and determined opposition to all arrangements having for their object the acquisition of information regarding the land tenures of the country, the rights of the ryots, and the produce of the soil, and this opposition has been on the whole successful. So far, then, as the history of the question can be taken as a guide to the future, it would seem that if village accountants (without whom nothing practical can be done in

the way of statistical inquiry) are ever to be of real use to the Government of the country, they must be converted into a Government agency pure and simple.

While successive Governments were thus engaged in a fruitless struggle to establish an effective local machinery for the record of economical facts, many earnest and able men were also devoting their scanty leisure to the cause of statistical research in these provinces. It has been stated that as a rule the efforts of such men were isolated, directed by no central organisation, and unsustained by any continuous plan of execution. An exception to this rule, however, must be made in favour of Dr. Buchanan Hamilton, whose statistical survey, begun in 1807 under the orders of the Court of Directors, and finished in 1814, is a monument of careful observation and exhaustive research. But as it had no higher aim than that of recording the social and economic conditions of the people in a few districts as they existed at the time of its compilation, and as there was no local machinery to keep its facts up to date, it soon became obsolete. The same remarks apply to the many subsequent attempts which were made from time to time by individual officers, as well as by the Government, to obtain statistical information to meet local administrative requirements, or special calls from the public at home or in India. The results of such inquiries have had only a temporary interest within limited circles, and have rarely been applied to purposes of



general or permanent utility. Thus it may be briefly said that from the pre-Mutiny period we inherit nothing in the way of statistical research or organisation, unless, indeed, the valuable knowledge begotten of experience, that the method pursued was wrong.

### III.

When the country had somewhat recovered from the disorder produced by the Mutiny, the Government of India made fresh endeavours to improve the quality and scope of the information at its disposal in regard to the internal condition of the empire. The extreme value of agricultural statistics had just been demonstrated by the report which Colonel Baird Smith had prepared on the famine which affected portions of the North-Western Provinces in 1861; and the Government of India was anxious that similar information might be, as far as possible, collected and compiled for other portions of the empire. When the matter came to be looked into, however, it was found that the sources of statistical information were confined to the administration reports of the various departments, and that the statistical forms, used in different provinces, and even in different departments, varied greatly. It was necessary to proceed on some uniform plan; and such a plan was accordingly devised by a Committee appointed to consider the question by the Government of India.

Some improvement was thus effected in the statements appended to the provincial administration reports, and to a certain, though limited, extent in the reports submitted by local officers and departments; but as far, at all events, as Bengal was concerned, the improvement was unsubstantial. It began at the wrong end of the administrative system. Reforms in the manner of exhibiting facts could be of no great value in a province where there were no means of ascertaining facts, and where, therefore, there were no facts worth the name to exhibit.

About this time the necessity for some local agency in Bengal for the collection of statistical information was enforced by the Orissa Famine Report, from which may be dated the birth of true statistical research in these provinces. One of the chief features of that remarkable report was the importance attached to the collection and use of statistics. The success of Colonel Baird Smith in dealing with famine history of 1861 was in it shown to be in a great measure attributable to the ample statistical information available in the North-Western Provinces, in which famine prevailed in that year. "The districts of the North-Western Provinces," said the Orissa Commissioner, "are provided with very large establishments, brought by long habit and close supervision to a high state of efficiency, by which the Magistrate and Collector is kept in intimate communication with every part of his district. The tehsildars and their subordi-

nates, the canungos, and the patwaris, furnish from year to year fiscal and agrarian returns of the most minute description, and can supply on very short notice special information which the occasion may require. Colonel Baird Smith was therefore able, by availing himself of the information to be found in the Collectors' offices, to give most precise information respecting the famine of 1861, and to embody it in precise maps and figured statements. All such establishments and all such information are entirely wanting in the Lower Provinces. The Collector may be said as a rule to have no executive establishments of any kind, and to be possessed of no statistics. To this circumstance the Commission ascribed the lack of reliable information, which prevented the local officers 'from reporting in a confident and positive manner,' in sufficient time for the application of a remedy, the degree of failure of the crops and the full extent of the distress which culminated so disastrously" in Orissa.

From the experience of this period, therefore, which in the history of statistical research in Bengal might be called the "period of tabular statements," but one positive useful result can be discerned, namely, that until a trustworthy machinery for collecting information locally has been organised there is very little good to be expected from even the most perfect system of tabular statement. This brings the present sketch down to the administration of Sir George Campbell.

## IV.

Before taking charge of the Lieutenant-Governorship of Bengal, Sir George Campbell had formed a strong opinion regarding the importance of obtaining full and accurate statistics concerning the internal condition of Bengal as a necessary antecedent to the adoption of measures of reform. In the Central Provinces he had witnessed the working of an organised establishment of village accountants, and recognised its immense value for all purposes of administration. He had taken a prominent part as member of the Committee appointed by the Government of India to revise and render uniform the forms in which the statistical returns were made from the various provinces, and as President of the Orissa Famine Commission he had forcibly drawn the attention of the Government of India and the local authorities to the absence of any local agency for keeping the district officers informed of matters affecting the condition of their districts. In succeeding to the Government of Bengal, his earliest efforts were, therefore, naturally directed towards the creation of a machinery whose function should be to assist the agricultural and industrial development of the province. Among the measures inaugurated by him the following may be enumerated :—

The employment of special officers to collect agricultural statistics in selected parts of the country.

The re-organisation of the system of agricultural registration and account.

The creation of subordinate executive establishments as an agency for the prosecution of local inquiries, and for the collection, examination, and record of statistics of all sorts.

The establishment of an Agricultural and Statistical Department in the Bengal Secretariat.

The regular publication of current prices of food-grains, crop prospects, and meteorological phenomena.

The establishment of model farms.

The establishment of an Economic Museum at Calcutta.

Passing by the special statistical inquiries as being of temporary rather than of permanent interest, it may be well to notice briefly the nature of Sir George Campbell's policy in connexion with the remaining subjects, for some of the proposals to be made further on are a development of that policy.

It has been noticed that the old village and barony officers of account and registration, the patwaris and canungos, had long disappeared from Bengal Proper. In Behar, where the village community preserves some vitality, the system of village account still existed, though in a state of partial disorganisation. In Orissa, the filing of accountants' papers in the Government offices was compulsory up to the year 1859, and they might still be found in various parts of that province.

Shortly after the famine of 1866, proposals were made by the Board of Revenue to revise and improve the fiscal registration establishment of Orissa by reducing the number of the registrars, defining their duties, and raising their pay, so as to place them on an efficient footing. It was at the same time proposed to abolish the accountants, who were said to be quite useless to Government, to resume their landed allowances, and to apply the funds so raised to meet the increased emoluments of the registrars. The Government of India, however, approved only so much of the scheme as related to the latter, but did not think it wise to dispense with the services of the accountants; for though the duties for which the latter class of officers were originally appointed might have fallen into disuse, they still might be utilised in the collection of statistics. The proper method of dealing with them was, in the opinion of the Government of India, to reduce their number, to improve their position, and to revise their duties in the same manner as had been done in the case of fiscal registrars in Orissa and the accountants in the North-Western Provinces. The re-organisation of registrars in Orissa was carried into effect from 1869, but the question of the re-organisation of accountants, both in Orissa and in other parts of the country, remained unsettled, as the Board of Revenue continued to lay great stress on the hopelessness, financial difficulty, and probable unpopularity of the measure. They asserted that the

expense of maintaining such establishments would be found an insuperable objection.

In this view Sir George Campbell, however, did not agree, and the outcome of the long correspondence which followed was a declaration of the Lieutenant-Governor's desire to re-organise the registration and account system, as prescribed by the old Regulations, in Behar, Orissa, and portions of Bengal Proper. With this object, rules for the appointment of registrars and accountants, and for the definition of their duties, were framed.

The sequel, however, will show that, like all preceding efforts, those endeavours of Sir George Campbell to revive the system proved fruitless, and the true cause of the failure is to be found in the fact that the attempted re-organisation proceeded on the lines prescribed by the old Regulations. A reform in the law should have preceded a reform in the system.

Perhaps the most important administrative improvement of Sir George Campbell's time was the creation of the "sub-divisional establishments." Bengal district officers, though as able and zealous as civil officers in other parts of the empire, were at a great disadvantage, compared with officers elsewhere, from the absence of any local executive establishments corresponding to the talukdari, tehsildari, or mamlatdari officials of other parts of India. Improvements in law and system had made it less desirable to employ the police in ordinary matters of district administration, and the

Bengal Magistrate, deprived of an executive police, had no executive instruments at all. The extension of the sub-divisional system, or, in other words, the reduction in the area of the territorial units of administration, had done a good deal towards effective control ; but the great addition had been to judicial rather than to administrative strength, the officers in charge of sub-divisions of districts having no executive establishments. The transfer also of rent suits from the revenue to the civil courts deprived these officers of an important source of information regarding rural affairs, and they continued to be so burdened with criminal, treasury, and other office work, that they were not free to move about their sub-divisions, to acquaint themselves with the country and the people, to superintend the details of land revenue settlements and other work, to investigate cases on the spot, and generally to carry on active personal supervision and administration within their jurisdictions. It was pointed out that a tehsildar, who is, in fact, the sub-divisional officer of other parts of India, has under his orders a deputy, who is well paid, and is available for all executive duties ; a canungo or agricultural registrar, who is the link between the Government and the patwaris, or village accountants ; and other subordinates to carry out his orders. Aided by this staff, the tehsildar can do whatever the Government requires of him. He is not a mere collector of revenue : he is the agent of the executive Government in all departments,



and among other duties he obtains and furnishes the statistics required as a help to guide the administration. There was in Bengal no machinery like this. If special inquiries had to be made, a special agency had to be employed, with a loss in economy and efficiency. To meet the want, a special service was created, consisting of sub-deputy collectors and canungos.

The sub-deputy collectors were to be executive assistants under the sub-divisional officers, and might be entrusted with the charge of treasuries and similar duties. The canungo would be mainly charged with the supervision of papers connected with local taxation for roads and communications, while, in addition to his duties as a public surveyor, he might be employed in looking after the execution of local works and projects, in superintending repairs, in conducting petty local inquiries, and in making himself generally useful in all matters under the sub-divisional officer. In due course these establishments were organised, and their usefulness proved so great that within a very short time they became settled institutions, and local officers eagerly sought their help. The information, however, which even with this help district officers were able to render was far from being as precise as could be wished for, and, of course, nothing in the nature of a continuous record could be maintained by those sub-divisional establishments. The success which has attended this, the most lasting reform introduced by Sir George Campbell,

is, however, an earnest of the greater measure of success which would attend a re-organisation devised to bring the Government into close connexion with the true sources of information on agricultural subjects. It is probable that now no practicable expansion of the sub-divisional system alone would lead to this desirable result.

One of the important results which followed the report of the Orissa Famine Commission was a perception of the need of agricultural statistics, and an improvement in the system of administration. The publication of the Commissioners' Report was followed by prolonged discussions on the best way of improving the machinery of administration in Bengal, in which the Government of India and the Home Government took part; but no decision was arrived at for years, during which local reform in this respect remained in abeyance. During Sir George Campbell's administration, from 1871 to 1874, a definite policy was at last marked out and adopted. As one of the most remarkable features of that administration was the desire to acquire a more accurate knowledge of facts and of the economical condition of the country, the improvement of agricultural statistics became an object of special care with the Lieutenant-Governor, and a special department in the Bengal Secretariat, since better known as the Financial Department, was organised. On the creation of this department, the immediate control of agricultural subjects was transferred from the Board of Revenue to the

Bengal Secretariat. The Board of Revenue watch the agricultural condition of the people because of its being inseparably connected with their duties as the chief controlling revenue authority in the province, but direct supervision no longer rests with them. It cannot be said that this change has produced satisfactory results, for the importance of the financial questions dealt with in the Secretariat, owing to the system of provincial finance, has dwarfed the attention which could be paid to other matters. The change has, therefore, had the result of destroying the responsibility of the Board of Revenue (never well defined, no doubt, nor capable of strict enforcement) without creating any effective agency capable even of filling the Board's place.

In order to familiarise the local officers with the use of statistics, and with the observation of facts which every district officer ought carefully to watch in a country where such a surprise as the famine of 1866 was possible, Sir George Campbell prescribed the punctual submission of a weekly return of the state of the weather and the crops in each district. The state of agricultural prospects, with the variations of rainfall and weather, and the fluctuations of the grain market in each district, were regularly reported and published in the *Gazette*. It is an indication of the ignorance which prevailed in official circles on these topics, that at first the importance of such information was not fully appreciated; but this did not last long, and it was due

to these returns that the want of rain in Behar in 1873 was at once known, and that early measures were taken to meet the famine which followed in 1874. It is satisfactory to learn that arrangements have recently been made to extend the usefulness of these meteorological returns.

The question of establishing model farms in India was first broached by the Government of India in 1871. The scheme propounded was, "that at least one large Government model farm should be established in every district, where all existing staples should be grown, at first in the most approved local native fashion, and year by year on improved and ever-improving systems, and from seeds year by year improved by selection, and, where necessary, by interchange with other similar farms; where cattle, sheep, and poultry breeding should be cautiously, but perseveringly, carried on, and where locally unknown staples and breeds should be gradually introduced, acclimatised, and popularised. It was designed that the whole of these farms should be closely connected with each other, and the managers encouraged not only to vie with each other in results, but to visit and communicate with each other in the freest possible manner. Liberal prizes should be offered to those managers who made their farms pay best; and besides this, provincial exhibitions should be held, with numerous prizes for excellence of produce, whether agricultural or animal, equally open to the farms and to the agricultural population generally. It was

proposed to start a special agricultural journal for recording progress in these farms—all experiments, all failures, all successes,—so that all might know what all were doing, and so profit mutually by each other's experiences. The scheme thus sketched out met with favour at the hands of Sir George Campbell, then Lieutenant-Governor of Bengal, and steps were taken to start model farms on a small scale at places suggested by local experience. The Government of India, being "desirous of affording every encouragement towards the promotion of the important and interesting experiments which the Lieutenant-Governor of Bengal wished to undertake, and fully concurring in the view taken by him, that it is only by the application of science and knowledge that Indian agriculture, which is now in a most backward condition, can be improved, such improvement being the greatest of all existing wants in India," sanctioned from the Imperial revenues half the cost of the proposed farms, viz., Rs. 50,000 for five years, or Rs. 10,000 per annum. Under these orders, seven model farms were established, which for some time thrived well and attracted much attention. The famine troubles of 1874, however, overwhelmed these infant institutions; and if any survived that sad time, it was only to languish for a while and then disappear. The success, however, which has attended the establishment of experimental farms in other presidencies is satisfactory evidence that such institutions are necessary in any attempt at agricultural

improvement ; and it is a satisfaction to know that the Hon. W. Rivers Thompson, the present Lieutenant-Governor of Bengal, takes a liberal and progressive view in this question.

Early in 1873 certain suggestions were made for the formation of an economic museum in Calcutta, and before his departure from India Sir George Campbell placed it on record that he had long felt the want of a practical collection of the products of Bengal,—an economic museum, in fact,—in which all the natural and industrial resources of the province might be brought together, identified, and compared. The first step towards the attainment of an exact and comprehensive knowledge of the agricultural and other industries of the province was to bring together and classify the raw products, and by means of a carefully-compiled catalogue to afford all requisite descriptive information with regard to each article. The Lieutenant-Governor believed that a careful and well-classified selection of specimens of all the products of the country, with printed papers telling all that is as yet known concerning every article of importance, would be a work which must bear fruit out of all proportion to the labour of its preparation. A central committee was accordingly formed to manage the Museum, to advise and direct local committees, to select and arrange the samples and models received, and to compile the descriptive catalogue. The institution, which received attention from Sir Richard Temple, has since languished ; but a

vigorous effort is now being made to revive and re-model it on a wide and practical basis.

Besides the matters noticed above, various other measures were adopted during Sir George Campbell's administration with the object of acquiring a full and accurate knowledge of the country, and hastening the development of its resources. Among executive measures, the foremost was the census of 1871, which, by showing the population to be over 63 millions, and not under 40 millions, as had been previously believed, almost revolutionised our ideas regarding the administration of Bengal. Among legislative measures, the Act for raising funds for local improvements in roads and communications takes priority as the first step in the way of local self-government outside municipalities. In addition to these epoch-marking events, arrangements were made for the registration of inland and river traffic; for the collection and publication of the statistics of sea-borne trade through improved agency in the Custom House and through the outports; for the opening out of roads, provincial railways, and other communications; for the extension or completion of canals; for the improvement of the condition of the ryots by protecting them from oppressive and illegal exactions; and by the establishment of primary schools. These are some of the measures which made Sir George Campbell's government, brief though it was, the epoch from which our ideas of progress in Bengal should date.

The views of Sir Richard Temple in regard to

the usefulness of statistical research and agricultural inquiry were not dissimilar to those of his distinguished predecessor; but his term of office was at the outset troubled by famine difficulties (which, however, were, for the first time in Indian history, victoriously overcome), and it ended prematurely by the Lieutenant-Governor's translation to the Governorship of Bombay. During Sir Richard Temple's brief term of office in Bengal, troubled as it was by unusual difficulties, no ground was lost in the campaign against darkness which had been so vigorously begun. The Lieutenant-Governor recognised the utility of agricultural statistics, and resumed the endeavours to record them which the famine had interrupted. He extended the system of registering inland traffic, and he foreshadowed that policy of provincial public works which his successor, fortunate in an overflowing treasury, prosecuted with such marked success and advantage to the province. He was alive to the benefits of imparting the statistical knowledge acquired by the Government to the public at large, in convenient shapes. He had the vast mass of the famine documents examined, and such facts as seemed to be of value in connexion with the food-supply of the people, its sources and extent, recorded for future guidance.

No fresh advance, however, was made in extending and strengthening the local machinery for collecting agricultural statistics; the model farms languished; and if some progress was made in



Behar in re-organising the system of village accountants, it was scarcely commensurate with the object in view. Then followed a lustrum of unfaith in the possibility of any good coming of agricultural statistics or improvement, when they, for instance, were deemed visionary who maintained that the wretched breed of Bengal cattle might be improved, or that the excellent wheat lands of Behar might, under a better system of tillage, be made to yield more than a half-dozen bushels per acre. During those five years of inaction, the ground that had been won was well-nigh lost; and except the sub-divisional establishments, the Economic Museum now in a defective state, some reports which few people read, and some dearly-bought experience, we can to-day point to no positive result or gain from all the efforts and strivings of a century after agricultural or industrial improvement in Bengal. If any progress is perceptible, it is in no way due to State initiative or help. These scanty results might seem to justify the abandonment of further efforts, were it not clear that it was the practice which was always in fault, and not the principle.

## V.

While the utility of State interference in the matter of agricultural improvement was being ridiculed in Bengal, the Famine Commission ap-

pointed by Her Majesty's Government was framing an elaborate scheme for the permanent organisation of an Agricultural Department in each province of the empire. The Commissioners, in commenting on the general character of the action taken by the Government in times of famine, pointed out the almost total absence, if not of trustworthy statistical knowledge as to the numbers of the people, at all events as to the rates of their births and deaths, and the influence on these rates of epidemic disease or local distress. They noticed the insufficient insight into the economical condition of the country which existed, particularly in regard to agricultural statistics; and they expressed a fear that even yet the vast importance of knowledge of this description was but imperfectly appreciated in many quarters. The want of it was experienced by the Commission in almost every part of their inquiries, and they felt it necessary emphatically to call attention to the subject, as such knowledge was in their opinion one of the principal instruments on which the Government must rely in preparing for its conflict with famine. They accordingly advocated not only the prescription of a definite system of procedure to be embodied in a Famine Code, but also the provision, by the aid of a special department of the Government, of an improved system of recording information on subjects connected with famines, and of collecting and dealing with the statistical returns relating to the weather, the

agriculture, the health, and the well-being of the people.

The efficiency of such a special department would, the Commissioners go on to say, depend mainly on the completeness and accuracy with which the agricultural, vital, and economic statistics with which it would have to deal were collected in each village and compiled in each sub-division and district throughout the country. To secure this end they recommended that the body of village accountants should everywhere be put on a sound and satisfactory footing as responsible public officers, with a clearly-defined set of duties; and that where, as in parts of Bengal and Sindh, the class had ceased to exist, through long disuse, it should be resuscitated. They recommended that the field survey, which supplies the basis of all agricultural statistics, should be completed in the provinces where it is in progress, and should be set on foot in Bengal, where it has not yet been introduced; and they advocated the appointment of supervising officers, who should control the work of the village accountants, test and compile the agricultural returns, examine the market prices, and ascertain from these and other data the character of each year's crop, according as it is below or above the average. The same controlling authorities would also scrutinise vital statistics, ascertain the causes of abnormal mortality, obtain correct information regarding the extent of food-stocks, the ebb and flow of local

trade, the current rates of interest on loans, the supply of labour, and the customary wages in the district. From a continuous record of such facts, it would be possible, the Commission thought, to judge whether the landed classes were in a depressed or prosperous condition, how far they were prepared to meet a calamitous season, and what classes of the population would be the first to succumb to the pressure of scarcity and high prices. These officers, while generally subordinate to the collector or the chief district officer, should be specially under the orders of an Agricultural Department, presided over by a competent officer as Director, in immediate subordination to the local Government.

Such were the recommendations which the Famine Commission made, after a careful study of the system of government in various provinces, for the improvement of the administration. They seem to be, as far as they go, wise and prudent, justified by the past history of this province, and calculated to advance the best interests of its inhabitants; but I would venture to say they do not go far enough. The circumstances of the time and the growing wants of the Bengal Province call for a much larger increase in the facilities for administration than would be supplied by the creation of an Agricultural Department. If the administration of Bengal is to be put on a footing satisfactory in itself and abreast of the times, the reform must begin at the top of the official scale,—

with the system of Government itself. The recommendations of the Famine Commission merit all the approval they have received; but a cordial acceptance of them is compatible with an advocacy of the larger measure of reform involved in the idea of an Executive Council for Bengal.

In considering whether the present constitution of the Bengal Government is well suited to the requirements of the country and the time, I am broaching no new question. It formed a prominent feature of the recommendations for the better government of Bengal made in 1867 by the President of the Orissa Famine Commission; and if the following remarks do not quite follow all the proposals made by Sir George Campbell, it must not be denied that those proposals have formed the solid basis of all subsequent discussions on this question. In these discussions, successive Secretaries of State, successive Viceroys in Council, and numerous distinguished members of the civil and military services in India and in England have taken part for the last fifteen years. The balance of opinion has seemed to incline now one way, now another, without any final decision having been come to; but the question has been so thoroughly thrashed out as to be now ready for final settlement. It is in the hope of promoting a settlement which would place the Government of these provinces abreast of the times that I venture to raise the question in this place.

In the first place, then, let us ask ourselves what

is meant by the Government of Bengal? Briefly, the answer might be—The Government of Bengal means the control in all respects, except those of foreign relations, of the affairs of 69½ millions of people of different nationalities and creeds, and in various stages of social progress. In other words, the Government of Bengal means the administration, in accordance with the dictates of advanced Western polity, of a country one-third larger in size than the United Kingdom and twice as populous, possessing every variety of climate, and producing every description of crop, abounding in mineral wealth, with a growing foreign trade already valued at 70 millions sterling per annum, with an expanding revenue and an annual expenditure for municipal purposes alone of close on five millions sterling. Such being, in briefest outline, what is meant by the Government of Bengal,—a government at least equalling in arduousness the home administration of a second-rate European State,—let us ask ourselves, again, is there anything in the circumstances of the country or the character of the people which renders such a great undertaking easy of accomplishment?

The answer to this question I give in the words of a distinguished statesman of more than Indian repute. Sir Bartle Frere, in a luminous State paper published by order of the House of Commons, says :—“ All these millions (inhabitants of Bengal), though probably the most docile people in the world as regards external government, are not

savages, nor even mere agricultural machines. Indeed, the Bengalis proper, who form the great majority, are in point of intellect amongst the most remarkable nations in the world. Many races excel them in vigour and in power of applying intellectual processes to produce practical results ; but in general keenness and subtlety of intellect I know of no people, in or out of India, who generally excel the Bengalis ; and I doubt whether, in any population under the British Crown, will be found such a large proportion of minds among the educated classes apt at every branch of abstract speculation in morals or philosophy, and so capable of applying the results to the theory of law and morals. There is not a question which has ever occupied the moralists, philosophers, and legislators of the civilised world which has not been, or is not now, intelligently discussed by the writers and thinkers, indigenous or exotic, who are to be found in the schools of Bengal. In a sacred language of their own, more precise, copious, and complete than any known tongue, they have, and now habitually study, the original germ of every great system of philosophy and morals which occupied the great teachers of Persia, Greece, and Rome. And the Sanskrit teaching is in various ways popularised in their own Bengali language.

“It is no facility in dealing with such a people to find that they are deficient in some of those masculine qualities of character which are necessary to form an independent nation. Indeed, it is this

defect which constitutes one of the chief practical difficulties in providing them with a good government. I do not by any means adopt the popular estimate of Bengali character, even when vouched for by such an authority as Macaulay; but admitting it, for the sake of argument, to the fullest extent, would (69) millions of intelligent women and children be such an easy charge to manage? I sincerely believe that to govern in any sense such a country and people is a task not inferior to that of governing a large nation in Europe. The task may be divided. The Secretary of State and the Viceroy may take care of all external relations of military and naval defence, of much of the finance and legislation, and may have a potential voice in every great question and a veto on every proceeding. But the mere functions of Reporter and Administrator-General over such a vast territory and so varied and numerous a population are of themselves quite as intrinsically important as the home administration of Spain or Italy. I have said nothing of difficulties arising from the presence of a large and powerful body of Englishmen scattered as planters and merchants over the entire country. I believe that their presence is of the utmost value and importance to Bengal; but they certainly do not diminish the labour of its government."

These words were written in 1868. The following extract from the latest official report on the vernacular literature of Bengal will show that in the interval the activity in literary channels of the



Bengali mind has not flagged. As to its activity in the field of politics, the newspaper press and the public platform throughout the province bear witness:—"It cannot be denied that Bengali literature has undergone remarkable expansion and development within recent years. Twenty or twenty-five years ago it comprised little beyond the works of Krittibas, Kashidas, and of Bharat Chandra, a few worthless dramas of an antiquated type, a few books written in curious and cumbrous prose, and some translations and compilations by Pundit Iswara Chandra Vidyasagara, Nilmani Basak, and others. Now, however, it possesses well-written books in almost every subject of study, and original works of considerable value in poetry, fiction, metaphysics, theology, antiquities, literature, &c. This wide expansion of the national literature seems to indicate a corresponding development of the national mind. Freed from its fetters, the Bengali mind is now studying all things, inquiring into all things, assimilating all things, and giving a voice to all things."

The reasons I have quoted led Sir Bartle Frere in 1868 to declare that, looking to the administrative machinery then provided for Bengal, the country could not be said to have more than the shadow of an administration. Improvements, no doubt, have been since introduced. Assam has been constituted a Chief Commissionership, the strength of the Bengal Secretariat has been increased, the offices of Judge and Magistrate have

been separated, reforms have been introduced into the police and Subordinate Judicial and Executive Services, and Magistrates of districts are now allowed to retain their appointments for a longer period than sufficed for them to learn the topography of their districts. These and other reforms, to which I need not specifically allude, have been effected ; but the administration, if it has been improved, has also been rendered more complex, while nothing has been done to lighten the ever-growing burden which rests on the head of that administration. In the last decade the ablest Indian statesmen, with but one great exception—Lord Lawrence,—maintained that it was impossible that any single man, however able, accomplished, and experienced, should, without some sort of council, successfully direct the government of so large and so complicated a community as that of Bengal. Since then, it may be urged, the government has been conducted on the whole with success, and without a council. But to those who look behind the scenes, it is no secret that under the pressure of necessity there has grown up a system of Government by Secretaries which differs but little from a Government with a council, except in the name, and, what is of far more importance, in the responsibility of the advisers. This was inevitable, for it was physically impossible for any Lieutenant-Governor in recent times, I will not say to peruse, but even to glance at the multitudinous files of papers which come before the Government of Bengal

in its various departments for examination and orders.

It is a fact to which the statistics of official transactions bear witness that the quantity of work falling on the Government of Bengal has increased, and is growing rapidly year by year. Not only has the work grown in quantity; it is also much more difficult and complex now than it was formerly. Questions connected with trade and commerce, with education, with legislation, with the extension of railway enterprise, with finance, and now with self-government, are not only more numerous than they used to be, but of a nature so complicated as to require more time and thought for their solution. As civilisation advances, there is more and more need of careful government; for, as a thoughtful writer has observed, civilisation is mostly attended by complication and by a diminution of power as regards individual effort. It is not to be expected that these difficulties will diminish; rather it is to be anticipated that they will grow with the country's development. Their further growth will impose on the Government of Bengal,—already the largest but one in India, as far as area, the most populous, and by far the most important as a civil Government,—a burden such as no single man, be he a miracle of industry and talent, can bear in any except the most prosperous times.

It is no secret that Lord Lytton's Government,

influenced by the success which attended the administration of Bengal by Sir Ashley Eden, who had no council, was in favour of the abolition of Councils in the Bombay and Madras Presidencies, and the administration of those presidencies through officials of Indian administrative experience. On this point, however, the members of Lord Lytton's council were not unanimous, and some weighty dissents from the recommendations of the majority were recorded. To most people who have thought over the progress of the Bengal Province and the steady development of each department of the administration there, the views of the dissentient members will very strongly commend themselves. No one who knew the late Lieutenant-Governor of Bengal will question his abilities and capacity for rule; and it is therefore no disparagement of Sir Ashley Eden's talents for government to point out what he himself publicly admitted—that his five years of office were years of unexampled prosperity. The weight of administration in Bengal never lies lightly on the shoulders of any Lieutenant-Governor; but all will admit that to govern in prosperous times is easier than to govern in those that are adverse. Happy the Governor who rules amid splendid harvests, thriving commerce, an overflowing treasury, and a peaceful people! But his success is surely no criterion of successful administration in times of scanty crops, of stagnant trade, of short balances, and of political unrest. In 1874 the machinery of Government

was out of gear, while the Lieutenant-Governor was battling with famine.

Apart, however, from these considerations, which are chiefly cited to show that the difficulties of government vary from time to time, there is abundant evidence to prove that since the quickening in administrative action which followed the inquiries of the Orissa Famine Commission the opinions of all the Lieutenant-Governors of Bengal except one have been in favour of relief being afforded to the Local Government. The work of Government has continued to increase yearly, as may be, though imperfectly, perceived from the fact that while in 1867 (Assam being then attached to Bengal) 62,878 letters were issued and received by the Bengal Secretariat, in 1881 (Assam having been constituted an independent administration) the number had all but doubled. It is true that the Bengal Secretariat now is stronger than it was in 1867; but although no one whose business has made him acquainted with the procedure of Government in Bengal would feel disposed to minimise the assistance which a Lieutenant-Governor receives from his Secretaries, it is one thing to have one's burden eased by responsible, and another and very different thing by irresponsible, advisers. The responsibility rests with the Lieutenant-Governor still, and consequently the necessity for careful supervision over every branch of the multifarious duties of Government. This responsibility can only be lessened by the creation of a Council, leisure being thereby

afforded to the Lieutenant-Governor for mature reflection on important matters.\*

A few remarks may here be offered on the best method of constituting a Council with regard to the existing machinery of Government in Bengal. It is generally admitted that, if unnecessary expenditure is to be avoided, the creation of an executive council in Bengal involves the abolition of the existing Board of Revenue. Before offering any

\* "What is wanted in every State is a body of philosophic,—no, I am afraid of that word,—of thoughtful statesmen, who, though partaking of the active duty of statesmen, should not be overweighted by their having too much of the conduct of ordinary business imposed on them. I know that this proposal is a very difficult one to realise in action. But then the whole matter we are discussing, namely, the providing foresight for government, is confessedly a very difficult one, and we cannot expect the remedy to be facile. Moreover, such a remedy as is proposed is rather contrary to what is called the spirit of the age. A single illustration will show what I mean. There are certain offices in the Cabinet of Great Britain to which no onerous duties are attached, and, indeed, to speak frankly, scarcely any duties at all. The present outcry is: 'Let those offices be abolished, or let onerous duties be attached to them.' *In a word, let every man engaged in the highest branches of statesmanship be oppressed by the severe and urgent routine of office which already prevents so many of the greatest men from being able to give due foresight to the affairs of the future.* Well, be it so: only remember that if the miller and his men are always employed in grinding for the necessities of the day, and there is no one left a little outside to watch the course of the stream, it may fail some day when it is most wanted, or it may come down in one tumultuous overflow, sweeping away the mill, the miller, and his men, broadening, as it goes, into one vast torrent of destruction."—Helps's "Thoughts upon Government."

suggestions, therefore, for the creation of a Council, it is well to inquire whether the time is seasonable for the abolition of the Board. Owing to changes in law and practice, the time seems to be eminently seasonable. Apart from the limitation in the Board's duties effected by Sir George Campbell, the revision of the Indian tariff and the abolition of the Import Customs duties have effected a sensible reduction in the Board's work. The important Departments of Salt and Opium are now being examined by Imperial Commissioners, and if it should seem well to those Commissioners, as I hope it may, to recommend an alteration in the systems of control of those departments, subordinating them more directly to the Government, it is very probable that the departments themselves would gain far more in flexibility and efficiency of administration than they would lose by the withdrawal of the Board's impersonal and irresponsible control. And this is especially true of the Opium Department, which, for many reasons of general policy and administrative detail, stands in need of the active personal supervision of the ablest officer on whom the Government of India can lay its hands. If, then, the Salt and Opium Departments were withdrawn from the Board's control, but little would remain to the Board of Revenue but the supervision of the land revenue administration, which in the Lower Provinces of Bengal, owing to the Permanent Settlement, is a far less onerous duty than in the other presidencies. That super-

vision could be effectually discharged by the Government, either directly through the Commissioners of Divisions, or mediately as to matters of routine and uniformity of practice through a single Chief Revenue Commissioner. In the present circumstances of Bengal, the Board of Revenue is, in the opinion of many competent judges, an encumbrance and hindrance to effective administration; and, unquestionably, its disadvantages are likely rather to increase than diminish with the progress of time. At present, direct communication is maintained between Government and Commissioners of Divisions on all topics of administration, except those connected with land revenue; and even the land revenue affairs of certain districts are managed without the intervention of the Board. This system is found to work well. The power and responsibility both rest with Government, and there is a very tangible and direct incentive in promoting good and restraining evil through all grades of the service. The Board's responsibility is ill-defined; it is powerless for good, while, by interfering between Government and the people, it does a great deal of harm. While the judicial system of Bengal was still undeveloped, while revenue officers owed a divided allegiance, and while the attention given to Bengal affairs was limited by the intervals of leisure which the Government of India could snatch from Imperial concerns, the Board of Revenue had its uses. Since the establishment of a separate local Government its usefulness has been



on the wane. As an executive agency it has been found wanting. Its shortcomings in the Orissa famine caused grievous disaster. Weak in action, the Board of Revenue has not always been strong in council; and it would, I venture to say, be difficult to make out even a plausible case for its continued existence if the control which it now exercises over the Opium and Salt Departments were withdrawn; if its functions as a bureau for checking revenue statements (a work which could be performed by the Office of Accounts) were abolished; if an appellate court for revenue cases were provided; and if the jurisdictions of Collectors and Commissioners were enlarged so as to embrace the despatch of routine duties, which now occupy so much of the Board's time. Therefore, without denying the former usefulness of the Board, it may be confidently asserted that, as a department of Government in the Lower Provinces of Bengal, it is now behind the time, and that the money spent in maintaining it could be turned to far better account in strengthening the administration in other directions.

It would, perhaps, be out of place on the present occasion to offer an opinion as to the precise way in which the expenditure now incurred in maintaining the Board of Revenue at Calcutta might be turned to better account in paying for an Executive Council. It would probably be advisable that the question should be carefully worked out (if the principle were approved by the Government of

India and Her Majesty's Government) by a Commission appointed to consider how far, and in what directions, the powers of district officers and Commissioners of Divisions should be enlarged, and what functions, with a view to preserve uniformity of practice throughout the province, might be entrusted to a Chief Commissioner, who should be, in revenue matters, the principal appellate, as well as the principal inspecting authority, subject, of course, to the control of Government. The Board of Revenue (with its establishments) at Calcutta costs now £26,000 per annum; and it is probable that all the improvements that have been suggested might be made without any increase on this expenditure, if, indeed, a saving on it could not be effected. At all events, there can hardly be a doubt that some such plan as this is necessary now, and will become more necessary as years roll on, and Bengal continues on its present course of rapid progress and development. I therefore hope that the question may receive consideration at the India Office and at the hands of the present progressive Governments of India and Bengal.

## VI.

To return to the question of the best means for creating an Agricultural Department in Bengal, and for fostering the agriculture and industries of the province. It may at the outset be said that the

object in view cannot be attained by any agency now at the disposal of the Bengal Government. This much we know from the Report of the Famine Commission. In fact, the Government of Bengal can, as things at present stand, command no efficient agency, or, indeed, no agency of any sort, for the execution of a policy of agricultural or industrial or statistical reform. While every other Government or Administration in India has either perfected or proposed arrangements in accordance with the policy recommended by the Famine Commissioners, and approved by Her Majesty's Government, Bengal alone, content with ignorance, has done nothing. Yet it has been authoritatively said that "Bengal especially is a province which is singularly deficient in opportunities for agricultural instruction, while it is perhaps of all Indian provinces the one where a reform of practice is most needed. *It is the province of whose agricultural resources and capacities the governing body knows least.*" The correctness of that assertion cannot be reasonably impugned. Every day that passes demonstrates our ignorance of facts which not only the Government, but the public in Bengal ought to know; and as the knowledge of such facts is becoming daily more essential to the governing body, if administration is not to be haphazard, some change has become absolutely necessary. One has only to glance at the Parliamentary returns to see that from Bengal alone, of all parts of India, can no information be obtained of the

cultivated area, of the area under any particular sort of crop, of the probable or average harvest outturn, or of vital statistics. It is, I believe, the fact that while every province in India has furnished to the Economic Section of the Calcutta Exhibition adequate information upon these topics, the Bengal Government has had to confess itself unable to furnish any information. That this should be the case in the province longest under our rule, where the vast majority of the people subsist by agriculture, is, to say the least, but little to our credit.

And this neglect has had its fitting result in the absence of all spirit of improvement among the people, and in a system of agriculture which has been aptly described as a mere spoliation of the soil. It is quite certain that things will remain in this condition so long as Government abstains from stimulating progress. No doubt some good may be done by the establishment of agricultural banks, and by the simplification of the procedure for borrowing money from the State for the improvement of land on which the Indian Legislature is now engaged. In the Bengal Tenancy Bill also, which is now before the Viceroy's Council, there is the germ of untold benefits to the peasantry of that Province. Furthermore, in the districts where the land revenue is not permanently settled, the proposed abolition of harassing and costly inquiries preliminary to a revision of settlement will be an enormous boon to the people, while the introduction

of a fixed calculable principle of enhancement or reduction of the State demand will confer corresponding benefits on proprietors, who may henceforward invest money in agricultural improvements with the certainty of enjoying the profits of such an investment. This reform in settlement procedure, with which Lord Ripon's name will henceforward be associated, has not received even in India that attention which it so well deserves. Matters of ephemeral interest engross the public mind, to the exclusion of questions of Imperial magnitude. But the reform in the procedure for assessing the land revenue, in provinces where periodic revisions of the assessment are necessary, is unquestionably a measure of the first importance, equal in benevolence to those great reforms which signalised Lord William Bentinck's administration, and, like them, destined, I doubt not, to live in the grateful remembrance of the Indian people. In Bengal, however, this great measure of reform can have less effect on agricultural progress than in the other provinces. What the people of Bengal stand most in need of is instruction and example; and to begin with, what we want is an agency to pioneer the way, whose special duty it will be to collect information from all existing sources as to the agricultural and industrial condition and prospects of the country, and to help the Government to read that information aright in the light of past experience and present wants.

It will be well to consider at some greater length

the recommendations of the Famine Commission on this question. These recommendations may be conveniently classified under three heads :—

More complete and systematic collection and publication of statistics of vital agricultural and economic facts.

General improvement of agriculture.

Organisation of famine relief.

In regard to the last head, it may at once be said that the subject does not fall within the scope of the present discussion. It is being exhaustively dealt with by the Government of India in connexion with the Famine Code, and its further consideration may be well postponed till that Code is submitted to the public. The point, therefore, to which consideration must be primarily given is the development of a permanent organisation for the maintenance of a system of agricultural inquiry, by which a thorough knowledge of the circumstances of every village may be continuously maintained from year to year by competent officials.

Nothing is more true than, firstly, that it is agricultural statistics which must underlie all real information regarding the condition of the people of this country, their wants, and their aspirations ; and, secondly, that without a field survey there can hardly be any agricultural statistics worth the name. If the experience of the past century, as traced in the preceding pages, teaches any lesson, it teaches

this : that it is hopeless to think of instilling life into the dry bones of the system of agricultural registration and account by legislative injunctions, or by such executive action as we can now legally take. To grow and flourish, a plant must be rooted in the soil ; but the practice of a century and the interests of those most capable of asserting themselves have withdrawn from the account system of the regulations all elements of vitality and usefulness. If into the system strength is again to be infused, if it ever is to become the useful agent of administration and the custodian of the cultivator's rights, as intended by early legislators, it must be entirely remodelled and brought into harmony with modern wants. An essential preliminary to such renovation is the verification of the facts on which the village accountant will have to work, and that a survey alone can give us. In estates, the property of the State or of wards of Court, we can prosecute surveys and record rights ; but outside their boundaries any labour bestowed in improving the account system, save in the way of legislation, will be labour wasted until the survey is begun. Legislation in the direction taken in the North-Western Provinces on the same subject must be undertaken.

Although an Agricultural Department in Bengal would thus find itself for the present fettered by inability to collect from the primary sources all that information of which it would stand most in need, still, while awaiting the removal of that disability, it would find ample occupation in the large

properties owned by the State or controlled by the Court of Wards. It will be the work of years to carry into effect, even in these properties, the principles which have been mentioned. But apart from the opportunities for good, which estates managed by Government would afford an Agricultural Department in Bengal, the Director of such a department would have, to use the words of Mr. Justice Cunningham, himself a member of the Indian Famine Commission, ample employment in "super-intending experiments too large and costly to be undertaken by individuals; in collecting, systematising, and diffusing information, and utilising the experience gathered in different circumstances and from remote localities; in organising agricultural fairs, exhibitions, and associations, by which local interest might be aroused; in affording facilities to European capitalists anxious to embark in Indian projects; in introducing new staples and new implements, and encouraging, by proper rewards, the efforts of inventors to meet the wants of the country; in supplementing the isolated and spasmodic efforts of the individuals by the continuous systematic action of a well-equipped and well-informed bureau."

## VII.

If at the present moment the action of an Agricultural Department would be impeded by the state of the patwari law, as far as agricultural



research in the larger portion of Bengal is concerned, it would be otherwise with the second main object advocated by the Famine Commission and approved by the Government of India, namely, agricultural improvement. It is, no doubt, a truism, that before improvements can be introduced into any matter the existing condition of things should be fully and accurately known; and inasmuch as admittedly we have no full and accurate knowledge on the subject of agriculture in Bengal, it may seem premature to endeavour to improve it. To this it may be said that on some points connected with native agriculture our ignorance is not such as to incapacitate us from rendering useful service. It may be admitted that, looking to the means and appliances at the disposal of the Bengal ryot, he usually gets as much out of the soil as it is possible for him to get. So far as non-scientific agriculture is concerned, there is probably but little to teach him. On the other hand, it must not be forgotten that his knowledge is altogether empirical—the best of its kind perhaps, but easily replaced by a better. Indications are not wanting that the ryot is ready to assimilate this better knowledge, especially as regards the use of agricultural implements and appliances, new staples, better seed, and improved methods of treating produce, if only these innovations are brought within the range of his scanty means and recommended by successful practice. To bring such improvements within the ryot's reach and to tempt him through his self-

interest to adopt them were among the objects of the experimental farms established in 1873. That these objects were not Utopian and that by perseverance success might have been achieved seem demonstrated by the success of similar experiments under the Agricultural Department of the Government of the North-Western Provinces ; and it is therefore satisfactory to learn that the present Lieutenant-Governor of Bengal has resolved on establishing an experimental farm in Behar which may serve as a nucleus of improved agriculture in that province. The facts brought to light in the report on the recent census of Bengal accentuate the necessity for early and energetic action. In a province where the rural population has reached the extraordinary density of 850 per square mile over large areas ; where there are but few towns and no manufacturing industries worth mentioning ; where, under a system of agriculture stereotyped for centuries, the soil does not yield one half of what it might be made to yield ; where mass education and the absorption of new ideas are in their infancy : surely it is time for the Government to do something to rescue the people from the inevitable fate which otherwise awaits them, or to save itself from the heavy cost of relieving periodical famine.

There are other considerations, too, which justify the revival of the system of experimental farms. There are scattered throughout Bengal large and valuable properties owned by Government ; the revenue settlement proceedings which from time to

time are undertaken bring others under official control; year by year the State takes upon itself the management of estates belonging to minor or other proprietors disqualified for the control of their properties. The policy of the Bengal Government in regard to these estates is, in theory, an enlightened and progressive policy, but it cannot be stated that the practice has always coincided with the theory. It may be fairly said that hitherto the charge of these estates has been committed to officers not always sufficiently trained for such duties. No doubt the duties have often been performed with success; but we know that instances of failure, through imperfect technical education, have not been wanting. It is hardly too much to say that no more important duty can devolve upon the Government than the provision of thoroughly efficient managers for its own properties and for the wards' estates of which it takes charge. The management of these estates should be a model for the imitation of landholders throughout the province, and, therefore, in connexion with the experimental farm, a training school should be established in which selected officers may become acquainted with correct and liberal principles of land management, and in which they may become imbued with the policy, and informed of the most promising methods, of fostering agricultural improvements. The principles and practice they learn in the experimental farms and training schools established by the State will be enforced

by them in the properties to the charge of which they may be afterwards appointed, and thus enlightened views as to the treatment of tenantry and the improvement of agriculture will have a chance of spreading through the country.

### VIII.

A few remarks here will not be out of place as to the general principles on which experimental farms and training schools should be conducted.

The object to be aimed at in the plan of agricultural reform, which has been thus briefly sketched, is twofold :—

The organisation of means for fostering the agricultural and economic development of the country by its rural population, on principles and methods which might advantageously be adopted by private landlords, no less in their own interests than in those of their tenantry and of the country generally.

The establishment of a school of training, in which young officers may acquire a practical acquaintance with agricultural and rural economy, with field-surveying, with the details of estate management, and with outdoor work generally.

If the lessons taught by past experience are not

to be ignored, it is a matter of primary importance to discover some working principle which may serve as a guide in the endeavour to make Indian agriculture efficient. There are two opposite schools whose views are incompatible with the conditions of sound and steady progress. One school, overestimating the empirical knowledge possessed by the native cultivator, holds that we can teach him but little that would be of any practical value; the other, overlooking the importance of taking this empirical knowledge as a foundation to work upon, would endeavour to supplant it almost entirely by an exotic system based on the results of modern science. The former school would leave undone what might well be attempted; the latter would attempt what is impossible of attainment. We cannot ignore the solid basis of empirical knowledge possessed by the native cultivator. Taking this as a foundation to work upon, an endeavour should be made to ascertain wherein it is susceptible of improvement in accordance with what modern science has approved, and consistently with the means and knowledge of the cultivator. This must be the guiding principle; any attempt to introduce a better mode of agriculture into India which would fail to take advantage of the knowledge the cultivator already possesses must end in failure.

The great difficulty an Agricultural Department will have to meet is how to overcome the *vis inertiae* of the Indian peasant class. The ryot is a slave to

custom, and very tenacious of the practices which have descended to him from his forefathers; but his conservatism is largely the result of want of means and knowledge. In earlier times and in backward tracts of country, where land was abundant, the scarcity of labour formed a bar to agricultural improvement; in more recent times over large portions of the country the demand for land has become so great that the peasant's holding is limited to what is seldom more than sufficient for his own and his family's subsistence, so that it is not to be expected that he would risk the loss of a portion of his means of subsistence by attempting innovations the success of which was not assured. By a series of carefully-conducted experiments we must arrive at those improvements which we can confidently recommend him to adopt. It is an indispensable condition of success, in endeavouring to overcome his prejudices and apathy, that he should be invited to undertake no improvement the advantage of which has not been tested and verified. We must endeavour to let him see for himself how, starting from the same primary conditions as he himself works upon, and by means within his own reach, results may be produced which he can appreciate, and the working of which he can understand. We must show him before his own eyes the advantage of what we consider it his interest to adopt. By such means we may hope to lead him gradually, and almost unconsciously, to assimilate the results of our scientific knowledge

with the routine of his own practice. As was said in connexion with the Agricultural Department in the North-Western Provinces, "We advocate no system of State agriculture, we do not propose to cultivate the people's land for them, but only by careful study of local conditions, and by the application, with suitable modifications, of methods thoroughly approved elsewhere, to evolve improvements in the indigenous practice, and so put these before all interested in such questions that they may realise their full scope and verify them for themselves." To carry out these ideas must be admitted to be a work of time, and may possibly involve considerable expense; but the more cautiously and tentatively the Bengal Government proceeds, the more justified will it be in anticipating solid and substantial success. Failures will no doubt occur, and sanguine hopes will meet with discouragement; but these are incidents in all great undertakings. Englishmen are not discouraged by failures. As has been pertinently said, the question whether Bengal and her ryots have or have not anything to learn from the results of scientific agriculture can hardly be decided by the successes or failures of a few experiments. In European countries and in America agriculturists, who combined scientific knowledge with practical training, persevered for years in the face of ignorant criticism, occasional failure, and temporary loss, and the result has been that agriculture is now a recognised science, taught in colleges, practised

by experts, and applied on farms to the manifest and great advantage of the old world and of the new. Sagacious and persevering effort in the same direction will yield similar results in India. The work must for years to come devolve mainly on the State, which has in many important industries pioneered the way for successful private effort; but there need be no more doubt about the ultimate results of teaching scientific and improved agriculture than about the wisdom of those statesmen who commenced the Government railway system, or who experimented in tea cultivation, or who prospected for coal, or who established a system of forest conservancy."

Having stated the general principles on which the experimental farms and training schools should be conducted, I venture to offer a few remarks on the direction which operations at these institutions should take. Reference has already been made to the good work done by the Agricultural Department in the North-Western Provinces in the cause of agricultural reform in India. With this work the name of Mr. E. C. Buck, now Secretary to the Government of India in the Department of Revenue and Agriculture, is connected; and from what he has done and written, Bengal may borrow many useful lessons. The most useful lesson for an infant Department of Agriculture to learn is, perhaps, to confine its endeavours, so far as improvements in the modes of cultivation and the introduction of new staples are concerned, to adopting any such



improvements as have been ascertained to succeed elsewhere. This is a good principle to follow ; and if operations are now to be undertaken in Bengal, care should be taken to ascertain by experiment how far improvements, found to be a success at Cawnpore, Awa, Sydapat in Madras, and other places, where experimental farms exist, may be grafted on to the indigenous modes of cultivation practised in the Bengal and Behar districts. For the advancement of agriculture in Bengal, the attention of the future Director, and through him of the managers of experimental farms, might be directed to such matters as the following :—

*Improved Tillage.*—The chief points to be attended to are early ploughing when irrigation is available, and deep or shallow ploughing, according to the character of the soil and the necessity of affording some protection from drought. The principal object here will be to improve the present very ineffective native plough in common use. It must not, however, be lost sight of that lightness of draught is a prime consideration in any new plough. No good purpose can be served by experimenting with an implement which it would be absolutely beyond the means of the cultivator to purchase, or beyond the strength of his plough-cattle to draw.

*Improved Manuring.*—Important as this point is, little can advantageously here be said about it. Everything depends on the nature of the soil, the kind of crops grown upon it, and the forms of

manure within the cultivator's reach. The chief point for consideration is the adoption of means for setting free an important manure like cowdung for agricultural purposes, and the conservation of forms of manure which are at present wasted by the cultivators. For the former purpose, the peasant must have put within his reach a substitute for cowdung, which he now uses as fuel, and this point will be considered under the head of arboriculture. Attention might also be paid to the supply of such artificial manures as may be within the cultivator's reach, *e.g.*, oilcake and bone-dust.

*Adaptation of new Methods of Cultivation.*—Improvements can be looked for chiefly in the introduction of valuable staples which are found to be grown with better results in other countries and places. No pains should be spared in endeavouring to ascertain why certain staples, for the cultivation of which the district appears to be suited, are grown with much better results in certain other localities.

*Selection and Distribution of good Seed.*—This is a point of great importance. The native cultivator, as a rule, pays far too little attention to this point, but the cause is for the most part want of means. It will probably be found that the better class of cultivators regularly reserve good seed, and exercise considerable care in its selection; but those who have to resort to the money or grain-lender for seed must trust to his perception of the advantage of supplying good seed to the cultivators who are

in debt to him. Inquiries should be instituted with a view to ascertaining the local practice in this matter, and means should be organised for correcting any defects that may be discovered in the local agencies of supply.

*Introduction of improved Agricultural Appliances.* Efforts should be directed towards introducing such improved implements as are distinctly beneficial and within the reach of the cultivator. Where agricultural operations are carried on mainly by the cultivator himself and his family, it may be a matter for consideration whether a merely labour-saving machine may always with advantage be adopted. There can be no doubt, of course, as to the absolute utility of such a machine, but there are certain forms of manual labour involved in working some machines which may not be acceptable to the ryot. This objection, however, does not hold good in the case of such implements as enable particular processes to be performed in an improved manner, whether labour be saved by them or not. Such machines should, when possible, be introduced; and it is of importance that they should be of simple but substantial construction,—inexpensive, easily handled. The cultivators should be instructed in the use of them by somebody thoroughly acquainted with their working, and it would probably be advisable, in the beginning at all events, to make arrangements for repairing them if they should happen to go wrong. Their construction, however, should be so simple

that they may be repaired by the village blacksmith.

*Prevention of Diseases which attack Plants.*—Little need be said under this head. The more common diseases to which plants are subject should be ascertained, and the best means for counteracting their effects made generally known.

*Introduction of New Staples.*—Great caution should be exercised in introducing these. It will always be better to begin with improving indigenous staples; but means should, at the same time, be adopted for ascertaining the suitability of the soil and climate for the growth of new products and the advantage which would accrue to the peasantry from cultivating them. That Indian peasants will take to new staples when their usefulness is proved is shown by the history of maize, or Indian corn. In Dr. Buchanan Hamilton's time it was hardly known in Behar; now it is, with millet, the chief food of the poorer classes of that province.

*Garden Cultivation.*—Attention should be paid to this. Besides tending to raise the standard of comfort of the peasant, garden cultivation, in the care and thoroughness with which it is usually carried on, sets a good example of the standard towards the attainment of which cultivation in the field should aim.

*Irrigation.*—Where canal water is not available and artificial irrigation is necessary, great attention should be paid in the sinking of wells in the most efficient manner, and to the provision of

water-lifts suitable to the means of the people. Where canal water is available, efforts should be directed towards securing its judicious utilisation. It has been found in some places where the introduction of canal water has enabled the area of cultivation to be extended that a tendency to careless cultivation and waste of water has manifested itself. Steps should be taken to prevent this undesirable result wherever it shows signs of appearing.

*Drainage.*—Here everything will depend on the character of the country, and no general rules can be laid down. In places where saline efflorescence abounds, efforts might be made to reclaim the land by drainage, which has, it is understood, been found useful for the purpose in the North-Western Provinces.

*Embankments.*—Here, again, everything depends on the character of the country. The inhabitants of villages, which would benefit by drainage or the construction of embankments, might be induced to co-operate voluntarily in carrying out some general scheme. This is, however, a work which zemindars might reasonably undertake with better advantage.

*Arboriculture.*—This is a matter of great importance, especially where fuel is scarce. It should be encouraged in every way. Where much uncleared land still exists, the main point to be attended to is the conservation of village plantations; in other places new plantations must be created. These might usefully take the forms :—

Planting groves of fruit-trees and valuable timber-trees.

Planting road avenues with similar trees.

Forming village plantations for the supply of fuel. These would, in time of drought, be available as valuable pasture-grounds.

Planting up waste lands. This is understood to form a valuable means for their reclamation.

It should be understood that it is not desirable that cultivated land, unless of a very inferior sort, should be taken up for these purposes.

*Cattle-breeding.*—This a point which requires particular attention. It is of the highest importance to introduce a better strain of cattle, and especially of plough-cattle. Inquiries will have to be instituted as to the degree of attention the people at present pay to this point, and the practices they follow.

*Prevention and Cure of Cattle-disease.*—Much benefit will result to the agricultural population from a study of cattle-diseases at the experimental farms, and for the provision of means for preventing and curing them. The mortality among Indian cattle from preventible causes is enormous, and no one who has not had personal experience on the point (as the writer has had) can conceive how greatly this single cause contributes to the cultivator's poverty. The present Lieutenant-

Governor of Bengal, Mr. Rivers Thompson, is, it is understood, now maturing a scheme for establishing veterinary schools, and certificated pupils from these schools might possibly be attached to the farms.

*Improvements in the Processes of preparing Raw Materials for Market.*—The expediency of attending to this matter is but the logical development of efforts to improve the cultivation of valuable staples and introduce new ones. The value of Indian wheat is now being recognised in England, and the diffusion of a little knowledge among the cultivators of the way of keeping their wheat free from impurities would benefit both the producers and consumers. The same remark applies to other products.

The preceding observations suggest some of the ways in which efforts might be made in the way of agricultural improvement. Much good work, for instance, is to be done in the way of stocking tanks and reservoirs with fish, and preserving them during the spawning season. A wide future of usefulness is also open to agricultural exhibitions, and the establishment of agricultural banks has received the approval of such an authority as Mr. Bright as a possible source of relief to the ryot's indebtedness. The attempt to introduce such reforms as these will cost money; but the Government should be prepared in such a cause to incur a reasonable expenditure. It will be for the Agricultural Department to see that the useful lessons

learned in the farms shall be disseminated. Indeed, every Government or ward's estate presided over by a manager trained at the farm should become itself a nucleus of improved agriculture.

Passing now from the aspect of the experimental farms as schools of agricultural improvement to their aspect as training schools, it may be said that perhaps in the immediate future more is to be expected from the latter aspect of the scheme than from the former. If there be a wide field for improvements in agriculture in Bengal, there is also much scope for better management of property coming under Government control, and much hope of an immediate return to labour bestowed in this direction. At the present moment managers of Government and wards' estates too often think that the collection of the rent demand and reduction of balances is the sole object of their official existence. An effort should be made to instil into the minds of all future managers a higher principle of duty, and by practice as well as by precept to teach them that it is as much their business to attend to the welfare of the tenantry entrusted to their charge as it is to collect rents. At farms worked on the principles already outlined, certain officers, afterwards to be employed in the management of landed property, might be stationed, to learn from the daily well-ordered routine of farm operations some knowledge of practical agriculture, so that they should, when reaching independent positions, be able intelligently to appreciate what they



see around them, suggest corrections, and introduce improvements. They might be trained in land-surveying, in a knowledge of soil classification, and of the suitability of various crops to each soil class, in the power of appreciating the due proportion which rent should bear to produce, and thus of gauging the ryot's position in estates committed to their care. They might also become by practice acquainted with the intricacies of zemindari forms and accounts. Those natives of India who are now perfecting themselves at the Cirencester Agricultural College in the knowledge to be derived from books, would obtain also at such farms a practical acquaintance with the agriculture of their country, and would thus become most valuable agents in its improvement. These details of land management, if learned at model institutions, will fit men for the performance of duties which, looking to the opportunities for good presented by them, are perhaps as responsible as any others under Government, but which now are entrusted to officers with no previous training, and often no aptitude for such vocations.

Although it is not intended in this sketch to exhaust all the subjects on which action might be with advantage taken in connexion with the creation of an Agricultural Department in Bengal, some reference may be made to the question of an Economic Museum. In order that a Museum may be brought into a state of efficiency and made to serve the best industrial interests of the country, there is happily no need to await the development of that local

machinery to which allusion has been made in the preceding pages. An Economic Museum at the chief centre of trade should provide the public with the means of ascertaining all that is known or recorded concerning the products and industries of the province. An opportunity now presents itself, in the organisations established in every district of the Bengal Province for the purposes of the Calcutta International Exhibition, not only to place the Calcutta Economic Museum on a sound footing, but to give it a wide development and sphere of usefulness, by making it the focus, first, of the agricultural industries and of the industrial arts of Bengal, and then to a certain extent of those of the whole Empire. This may be done by connecting the Museum on the one hand with local museums in the producing districts, and on the other with foreign markets. The Calcutta Economic Museum may thus be made to serve, in correspondence with similar museums at other provincial capitals, the wider objects of an Imperial institution.

## IX.

In thus bringing under review the various phases which agricultural improvement and statistical research have passed through in the Lower Provinces of Bengal within recent times, my object was to ascertain the direction in which, judging from the experience of the past, further progress seemed most practicable. It will be seen that progress is

not immediately practicable in what must always be the fundamental measure of improvement in such affairs, namely, the accurate record from month to month and from year to year, through trustworthy village agency, of agricultural, vital, and economic statistics, and the careful analysis and compilation of such statistics. To render progress practicable in this direction it is absolutely essential that an agency should be established to deal with the work. Until, by the organised exertions of such an agency, acting on the materials afforded by the cadastral survey of the country, or portions of the country, and by the remodelling, in accordance with the requirements of the times, of the law connected with village accountants, a basis of accurate knowledge of facts is laid, no permanent and continuous benefits to the agriculture and industries of the province can be expected. The creation of such an agency, and the prosecution of a cadastral survey, which will give us what we now sorely need in Bengal—a knowledge of economic facts,—intimately depend on the legislation now begun on the Bengal rent question; and in this matter, at all events, no one except extreme partisans of the zemindars will be offended if I express the hope that speedy success may crown Lord Ripon's constitutional efforts to apply a remedy to abuses which have long troubled the peace and depressed the prosperity of the country.

In conclusion, I may say that while the want of this real basis of all true statistical knowledge on

the subject of rural economy naturally renders action in the way of agricultural improvement uncertain and halting ; still the facts recorded here and there in the desultory inquiries which have been prosecuted indicate the general direction, if not the best and nearest road. These inquiries should be continued on a more systematic plan, and therefore with greater prospect of useful results. Even the results that have been attained assure us that, pending the fuller illumination which time must bring, we shall not go wrong if we direct the influence of scientific research and larger knowledge on the system of Indian agriculture now stereotyped for centuries ; if we do what in us lies, at first in a tentative, but afterwards, as we feel firmer ground, in a bolder way, to enable the Indian peasant to assimilate improved ideas ; and if we bring home to the outside world the knowledge of what agricultural and industrial India is capable,—if even a beginning could be made in this last-mentioned direction (and of this the forthcoming International Exhibition at Calcutta gives good earnest), and if the ground won to-day be not lost through apathy to-morrow, then the seed now sown will in the fulness of time bear fruit an hundredfold.



















